toward the spine and toward the feet, thus placing it in its normal position, the disturbances in the movement of the arm disappear immediately. This manual pressure can be substituted by operation, through a pull in the opposite direction. A free exposure of the field of operation is obtained by an incision from the superior vertebral angle of the scapula, downward to the first lumbar vertebra. A piece of the fascia lata is taken, about 20 cm. long and 4 to 5 cm. wide. One side of the narrow end is fixed by sutures to the vertebral border of the scapula, and while an assistant presses the scapula toward the spine, and downward, the other side is sutured under strong tension to the latissimus dorsi and deep muscles close to the spine. In order to prevent the adhesion of the fascial strip to the overlying skin, it is placed under the trapezius muscle. In a case so treated, in which the paralysis had existed half a year, and had rendered the patient completely unable to work, in ten days he was so improved functionally that neither he nor his physician could see any difference between the affected and normal sides. Cosmetically, the improvement was marked.

Contraindications to the Intravenous Infusion of Saline Solutions.—BERTELSMAN (*Zntrlbl. f. Chir.*, 1910, xxxvii, 1417) says that König has twice seen death hastened by large intravenous infusions of saline solutions. He had previously strongly recommended them, and the present paper was written chiefly to meet the objections of Heineke and others to them. Heineke says that they are strongly contraindicated in peritonitis cases in which occur disturbances of circulation from paralysis of the vasomotor centres. In these cases the heart is deprived of blood because the greater part of the latter is retained in the relaxed abdominal vessels. Bertelsman believes that by filling up the whole system of bloodvessels a quantity can be introduced which will compensate for the relaxation of the abdominal vessels. The heart will thus be filled and after some time the circulation will return approximately to the normal. In this way favorable operative conditions will be produced. That this hope is justified he has proved many times. It has been shown that in peritonitis we do not have to deal with the bacterial contents of the blood, since surgical peritonitis, as a rule, is not a general infection. It is well known that saline solution impairs the bacterial properties of the blood, and that therefore it should not be employed in general infections. When there already exists weakness of the heart, one should proceed with more care. In severe pneumonias, since the bacteria are circulating in the blood, the disturbances of the circulation can best be combated by small quantities of saline solution with adrenalin added.

Operation for Exstrophy of the Bladder.—FINK (*Zntrlbl. f. Chir.*, 1910, xxxvii, 1467) refers to the ingenious operation of Makkas, in which a new bladder was made of the isolated cecum, the ureters implanted into it, and the appendix used for a urethra (for abstract, see this journal, 1910, cxl, 761). Fink did an operation in which, after closing the ectopic bladder, he used the appendix to conduct the urine from the bladder to the cecum. It consisted of the following steps: An incision was made along the junction of the bladder and the skin and including the remains of the urethra. The bladder wall was then separated down to the ureters, which were catheterized. The peritoneum was opened in the upper part of the circumference of the bladder and the appendix was located and brought into view. It was 6 cm. long and was divided transversely near its peripheral end. The canal was then irrigated with water toward the cecum to cleanse it and establish the permeability and caliber of its canal. The bladder opening was closed by suture of the muscularis and mucosa to the upper pole. A perforation was made into the bladder at its deepest part and the end of the appendix introduced through it and sutured in place. The mesentery of the appendix was sutured to the bladder to fix it more securely. The remaining opening was then closed. The patient died, so that the functional results could not be shown. The following advantages are advanced for the operation: The bladder is formed of tissue anatomically and physiologically normal. The normal valves of the appendix prevent the entrance of gas and feces, as after the Maydl operation, when the ureters are transplanted into the sigmoid. If infection should occur, the appendix could be conducted to the surface by a second operation.

Figures about Fractures and Re-fractures of the Patella.—CORNER (*Annals of Surgery*, 1910, lii, 707) collected the statistics of cases of fractures of the patella admitted to St. Thomas' Hospital during the years 1890 to 1907, inclusive. There were in all 504 cases, and of these, in 55 re-fracture occurred. The most important points which they show are summarized as follows: Fractures in the lower half of the patella are the most frequent (83 per cent.). Triangular-shaped patellæ are the most common; oblique-shaped patellæ come next. Transverse fractures are the most frequent; comminuted fractures come next. Three males fracture their patellæ to one female. Fractures of the right patella are a little more frequent than of the left. Two underwent operation to every one that did not. Fracture of the patella is most frequent between the ages of thirty to forty years. It is the most frequently re-fractured bone in the body. After operation, 69 per cent. of re-fractures occur in the first year after the injury. After treatment other than operation, 86 per cent. of re-fractures occur after the first year. The percentage frequency of re-fractures is approximately the same after operative as it is after non-operative treatment. The advantages of operation are solely in the quick and complete recovery of the function of the limb.

Surgery of the Thorax.—QUINBY (*Surgery, Gynecology, and Obstetrics*, 1910, xi, 482) says that by the intratracheal insufflation method of operation of Meltzer and Auer we can now create a situation corresponding to that of internal respiration, in which the dangers of pneumothorax are entirely overcome. It is the simplest method known which will "breathe for the patient." Other methods have allowed carbon dioxide slowly to accumulate in the air passages, and finally endanger the heart. By this new method it is very hard or even impossible to give sufficient ether to kill. Its only disadvantage is the necessity of intubation of the trachea, with possible danger of pneumonia from this source. The evidence which we have thus far tends to show that this danger has been much overestimated. In none of the cases in which the method has been applied to man has bronchitis or pneumonia occurred.

In so far as Quinby's experimental observations go, they entirely confirm the much greater experience of Meltzer, Carrel, and Elsberg, who find that the method of intratracheal insufflation is very safe, and rests on a firm physiological basis. In some thirty observations, some of them as long as four hours, others during such severe operations as total right pneumectomy and œsophageal sutures, Quinby has never had a death due to the method of anesthesia. The apparatus is about as easily carried as the usual Bennett inhaler kit, so that with it every surgeon has at his command an arrangement for making operative pneumothorax harmless. Of moderate price, easily transportable, and safe, it should make operations on the thorax common, and done by many surgeons, instead of, as today, by only a few. Further than this, it places at his command an apparatus which will "breathe for the patient" in case of respiratory failure from many causes other than acute pneumothorax. Already it has been used with success in cases of myasthenia gravis, severe opium poisoning, and cessation of respiration from brain abscess, as well as in the operative cases. It is Quinby's hope that many surgeons will familiarize themselves with the principle underlying this method, as it is one which will undoubtedly be of great value in the development of thoracic surgery.

THERAPEUTICS.

UNDER THE CHARGE OF

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The Use of a Salt-poor Diet.—Leva (*Med. Klinik*, 1910, vi, 782) gives a review of the literature dealing with the different indications for a salt-poor diet. He then discusses more particularly the practical application of such a diet and gives valuable tables showing the salt content of various articles of food based upon 360 analyses. There are included in his tables many foods poor in salt content that serve to make a liberal mixed diet in cases in which abstention from salt is indicated. These tables should be consulted for details, as only general statements are given here. Meat is the one article that seems to require considerable salt to render it palatable. In general, beef, veal, pork, and fish require more salt than poultry to render them palatable. Some of the meat foods contain a higher percentage of salt to start with. Butter sauces, and sauces with egg-yolk, oil, vinegar, lemon, etc., will take the place of salt if given with many of the meat foods. Eggs may be used to supply protein as they contain only a small percentage of salt. Soups and meat extracts require large amounts of salt to render them palatable. Vegetables are, as a rule, low in salt content with the exception of celery, carrots, savoy, spinach, cauliflower, and some varieties of winter cabbage. Bread should be made without salt and eaten with sweet butter. Some varieties of cheese contain a high percentage of salt, while